

### **ABSTRACT OF THE DISCLOSURE**

A method and apparatus for uniquely identifying signal sources in a multisource signal. True levels of signal components transmitted by each of the co-channel base stations in the area under test in a wireless network are measured and associated with the appropriate (originating) base station in presence of co-channel and adjacent-channel interference without interrupting service. The present invention is based on an "area-measurement" approach and relies on relative time-of-arrival (RTOA) measurements of the signal components impervious to the existence of the phase drift between the scanner and base stations.